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ABSTRACT

This report provides information on vocational education programs at area vocational schools, community colleges, and universities in Missouri. First, an executive summary describes the operation of vocational education programs in the state and the responsibilities of different educational sectors for vocational education. Next, enrollment trends are provided for community colleges and four-year colleges receiving vocational education funding. Next, the geographical locations of each vocational technical school, community college and four-year college and university is specified and the proximity of many vocational technical schools to a college or university is highlighted. A summary is presented of results of a survey conducted to assess the comparability of vocational education programs offered at two- and four-year colleges with those offered by area vocational technical schools. Appendices include a list of vocational education programs at community colleges and nearby area vocational technical schools. (HB)

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VOCATIONAL EDUCATION

MISSOURI COORDINATING BOARD FOR HIGHER EDUCATION

MAY 1985

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EXECUTIVE SUMMARY

Vocational education is provided on instructional levels suited for secondary students, postsecondary students, and adults. Vocational programs for secondary students and adults are provided by comprehensive high schools and area vocational technical schools. Programs for postsecondary students and adults are provided by public community colleges and four-year colleges and universities. The Department of Elementary and Secondary Education provides funding for many of these programs through state and federal vocational education funds. Data provided in this report pertain to those vocational education programs at area vocational technical schools, community colleges, and four-year colleges and universities which receive vocational education funds.

The enrollment pattern in vocational education from 1978-1982 reflects the state policy to emphasize vocational instruction at the secondary level. More students were served by programs at the secondary level than at the postsecondary or adult levels. However, the enrollment pattern for secondary programs remained relatively stable while enrollment in postsecondary and adult programs increased. The overall enrollment of 145,383 in 1982 decreased to 139,380 in 1984. This can be attributed to two factors: the decrease in secondary enrollment and the underrepresentation of postsecondary students in these statistics. The decline in secondary students in vocational education has many contributing factors. The underrepresentation of postsecondary students is a limitation of the data collected on vocational education students because only those students in programs supported by vocational education funds are reported.

Area vocational technical schools are frequently located in close proximity to either a community college or a four-year college or university. Thirty-three of the 59 area vocational technical schools are located within approximately 30 miles of one of these institutions offering vocational education programs. Five colleges and universities have more than two area vocational technical schools located within 30 miles. These five colleges do not include the three community college campuses which serve as the sites for a local area vocational technical school.

Proximity of more than half of the area vocational technical schools to a postsecondary institution providing vocational education suggests the possibility that both levels of institutions may be offering similar or identical programs. A survey of postsecondary institutions revealed that the most obvious difference between the programs offered by secondary institutions and postsecondary institutions is in the level of instruction provided. Survey results also indicated that programs with similar titles do not necessarily contain the same content. Several postsecondary institutions are involved in efforts to assess the comparability of programs offered at nearby area vocational technical schools.

The Coordinating Board for Higher Education has recommended that this report be submitted to the State Advisory Council on Vocational Education and that the Council undertake a careful examination of the potential duplication of program purposes in vocational education programs offered by area vocational technical schools and two- and four-year colleges with the outcome to be an even more effective and efficient delivery of postsecondary technical, vocational, and transfer programs.

VOCATIONAL EDUCATION

Introduction

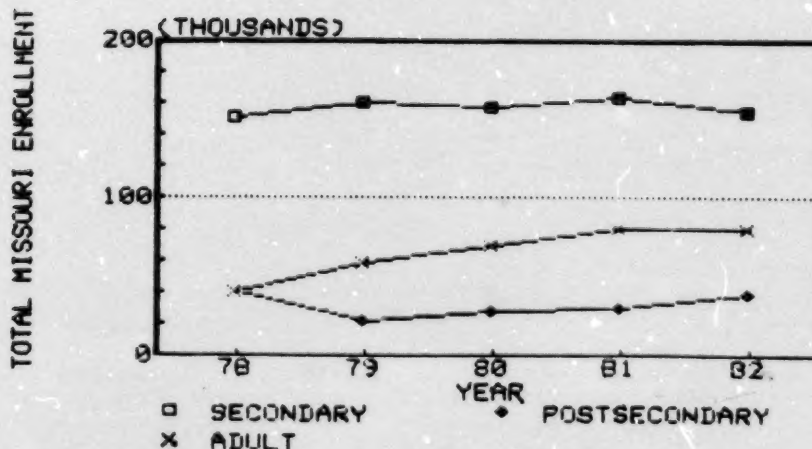
Vocational education programs are offered on multiple instructional levels at publicly supported schools and colleges. The Department of Elementary and Secondary Education (DESE) divides vocational education instructional levels into three groups: secondary, postsecondary, and adult. Secondary vocational education is provided by comprehensive high schools and area vocational technical schools. Postsecondary vocational education is provided by community colleges and four-year public colleges and universities, with the major portion of postsecondary activity occurring at community colleges. Adult vocational education is provided by both secondary and postsecondary institutions. The information contained in this report is based on DESE data pertaining to vocational education programs which receive state and federal vocational education funding through DESE.

Enrollment Trends

Department of Elementary and Secondary Education statistics indicate that more than 139,000 people will be enrolled in vocational education programs in 1983-84. Due to reporting requirements by the federal government DESE statistics reflect the level of activity in programs funded by state and federal vocational education monies administered by DESE. This limitation results in underrepresenting the number of people served by community college and four-year college and university vocational programs because enrollment data is collected for only those college programs receiving vocational education funding. The estimated FY 1984 enrollment of 139,380 includes 36,804 students in postsecondary institutions, or about 26% of the total. This enrollment figure is representative of those students enrolled in DESE funded programs.

Graph 1 provides some historical perspective on the level of vocational enrollment from 1978-1982.

GRAPH 1
VOCATIONAL EDUCATION ENROLLMENTS
1978-82



Secondary enrollment was stable over this period while substantial increases are evident for postsecondary and adult enrollment. The number of students enrolled at each level of instruction also document the long-term emphasis placed on secondary vocational programs.

The decline in secondary education enrollment has had the effect of decreasing the reported vocational enrollment at all levels between 1982 and 1984. The total enrollment of 145,383 in 1982 was expected to decrease by 4% to 139,380 in 1984. Although the number of students served by secondary schools is expected to decrease, the number of students in postsecondary programs is expected to increase. This can largely be attributed to greatly expanded efforts to support customized training activities at community colleges. Enrollment comparisons for each program area and level of institution are displayed in Table 1 for FY 1982 and projected FY 1984. It should be noted that adult secondary programs are those programs provided for adults by area vocational technical schools. Similarly, adult postsecondary programs are those programs provided for adults by postsecondary institutions.

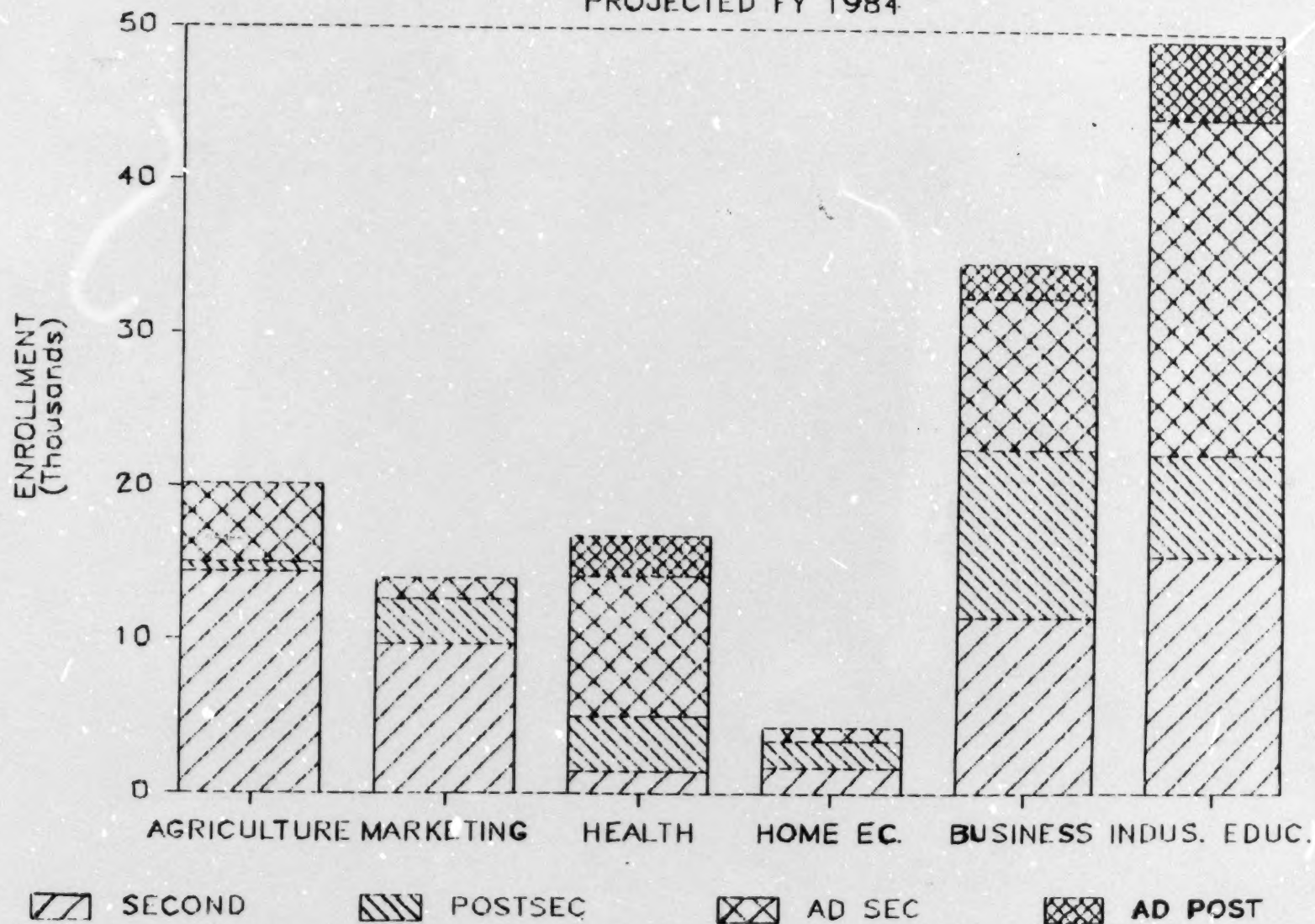
The projected FY 1984 enrollment distribution is displayed according to program area and instructional level in Graph 2. The graph illustrates that industrial education continues to be the program area of greatest enrollment. This is largely due to the substantial number of specific programs coded in this program area. The graph further illustrates the point that most students in programs supported with vocational education funds will be enrolled in secondary and adult secondary programs.

Table 1. Vocational Education Enrollment, FY 82 And Projected FY 1984

Program Area	Secondary			Postsecondary			Adult Secondary			Adult Postsecondary			Total Enrollment		
	FY 82 Actual	FY 84 Projected	Percent Change	FY 82 Actual	FY 84 Projected	Percent Change	FY 82 Actual	FY 84 Projected	Percent Change	FY 82 Actual	FY 84 Projected	Percent Change	FY 82 Actual	FY 84 Projected	Percent Change
Agriculture	14,839	14,400	(3.0)	613	610	(0.5)	5,034	5,100	1.3	39	0	--	20,525	20,110	(2.0)
Marketing/ DE	9,725	9,700	(0.3)	2,753	3,000	9.0	1,108	1,350	21.8	--	0	--	13,586	14,050	3.4
Health	1,365	1,364	(0.1)	3,267	3,631	11.1	21,892	9,217	(57.9)	19	2,603	13,600	26,543	16,815	(36.7)
Occupational Home Ec	1,526	1,608	5.4	1,188	1,838	54.7	790	845	7.0	11	30	172.7	3,515	4,321	22.9
Business and Office	11,505	11,511	0.1	10,436	11,073	6.1	8,918	9,925	11.3	1,682	2,213	31.6	32,541	34,722	6.7
Industrial Education	17,563	15,574	(11.3)	7,626	6,700	(12.1)	23,058	21,982	4.7	426	5,106	1,098.6	48,673	49,362	1.4
TOTAL	56,523	54,157	(4.2)	25,833	26,852	3.7	60,800	48,419	(20.4)	2,177	9,952	357.1	165,383	139,380	(4.1)

GRAPH 2.

VOCATIONAL EDUCATION ENROLLMENT PROJECTED FY 1984



Geographic Location

The locations of each area vocational technical school, community college, and four-year college and university is identified on Map 1. There are 33 area vocational technical schools located within 30 miles of a college or university. Three community colleges also serve as the site for an area vocational technical school. These are Crowder College, Jefferson College, and State Fair Community College. The following list pairs each college or university with those area vocational technical schools located within 30 miles. Five colleges or universities (Metropolitan Community College, St. Louis Community College, Central Missouri State University, Lincoln University, and Missouri Southern State College) have more than two area vocational schools within 30 miles of them.

Community College

Area Vocational Technical School

Crowder College

Franklin Technical School (Joplin)
Crowder AVTS (Neosho)

East Central College

Four Rivers AVTS (Washington)

Jefferson College

Jefferson AVTS (Hillsboro)

Metropolitan Community College

Platte City AVTS
Excelsior Springs AVTS
Fort Osage AVTS (Independence)
Joe Herndon AVTS (Raytown)
Kansas City AVTS

Mineral Area College

Lead Belt AVTS (Bonne Terre)
Arcadia Valley AVTS (Ironton)

Moberly Area Junior College

Moberly AVTS
Macon AVTS

St. Louis Community College

Lewis and Clark AVTS (St. Charles)
O'Fallon Technical School (St. Louis City)
St. Louis County Special School District

State Fair Community College

State Fair AVTS (Sedalia)
Warrensburg AVTS

Three Rivers Community College

Current River AVTS (Doniphan)
Poplar Bluff

Trenton Junior College

Chillicothe AVTS

Four-Year College/University

Central Missouri State University

Lincoln University

Missouri Southern State College

Missouri Western State College

Northeast Missouri State University

Northwest Missouri State University

Southeast Missouri State University

Southwest Missouri State University

Area Vocational Technical School

Clinton AVTS
State Fair AVTS
Warrensburg AVTS

Columbia AVTS
Tri-County Technical School (Eldon)
Nichols Career Center (Jefferson City)
Linn AVTS

Carthage AVTS
Crowder AVTS
Franklin Technical School (Joplin)

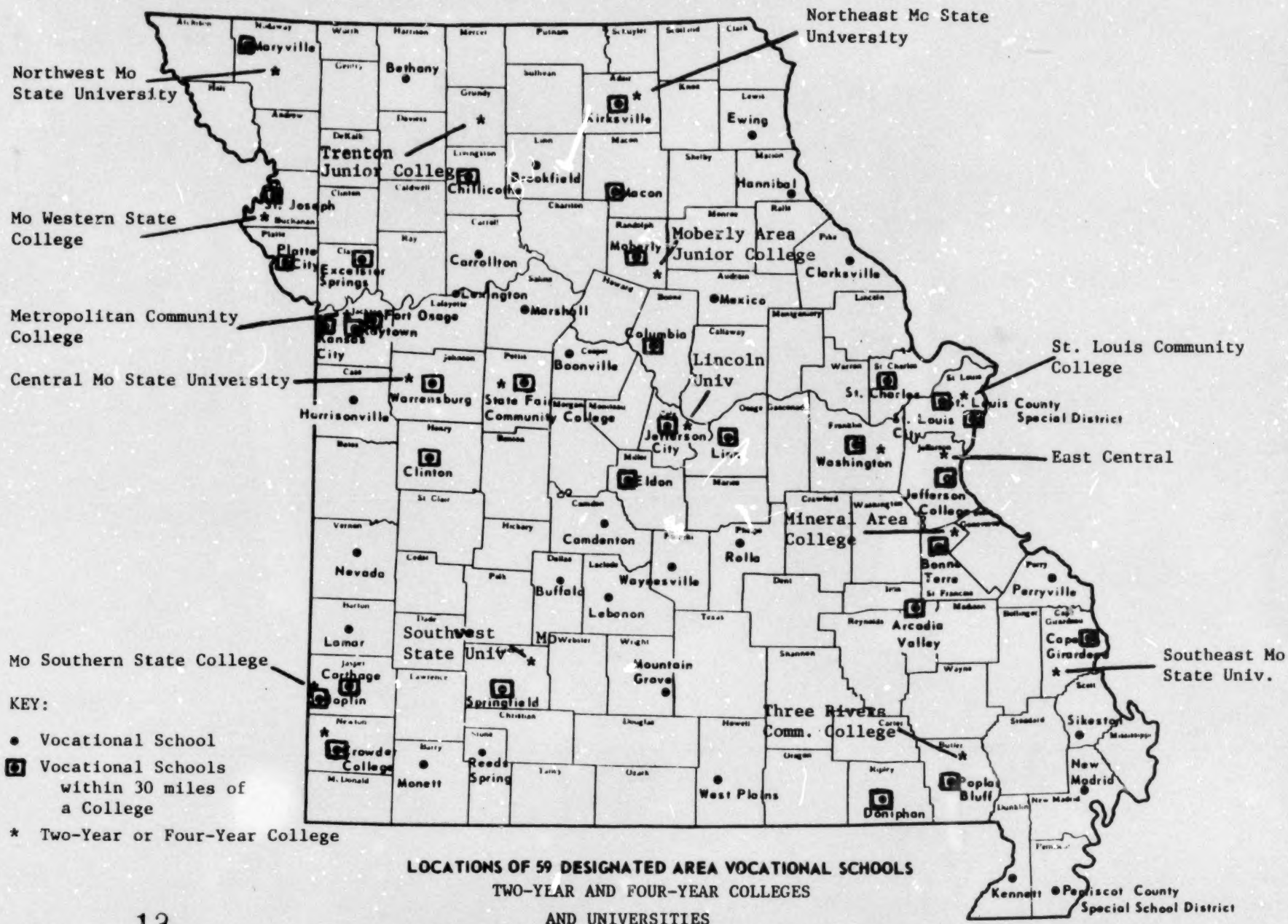
Platte City AVTS
N.S. Hillyard AVS (St. Joseph)

Kirksville AVTS

Northwest Missouri AVS (Maryville)

Cape Girardeau AVTS

W.J. Graff AVS (Springfield)



Vocational Education Programs

Each of the two-year and four-year colleges and universities with vocational education programs listed in the 1983 **Directory: Vocational Programs**, published by the Department of Elementary and Secondary Education, responded to a survey on vocational education programs. Each institution assessed the comparability of its vocational programs with programs offered by area vocational technical schools. For the purpose of this survey, programs were to be judged comparable if it would be reasonable to establish an articulation agreement between the area vocational school program and the college program.

The results of the survey indicate that similarly titled programs at area vocational technical schools and colleges cannot necessarily be equated to comparable programs. The most obvious difference is that programs at area vocational technical schools are designed to serve a secondary school population, and that there may be little resemblance between a similarly titled program at an area school and a college. Some respondents noted that area vocational school programs are similar to portions of the college-level program. Some institutions also noted that they have developed articulation agreements with nearby area vocational schools or are in the process of assessing the comparability of programs.

A chart listing the colleges and nearby area vocational technical schools with comparable programs is presented in Appendix A.

Appendix A

**VOCATIONAL EDUCATION PROGRAMS AT COMMUNITY COLLEGES
AND NEARBY AREA VOCATIONAL TECHNICAL SCHOOLS**

Crowder College—Franklin Technical School (Joplin), Crowder Area Vocational Technical School

Franklin Technical School	Crowder College
Nursing (Practical)	Practical Nursing
Crowder AVTS	Crowder College

No comparable programs reported.

East Central College—Four Rivers Area Vocational Technical School (Washington)

Four Rivers AVTS	East Central College
Automotive Mechanics	Automotive Mechanics
Building Trades	Building Trades
Secretarial	Secretarial
Welding	Welding

Jefferson College—Jefferson Area Vocational Technical School

Jefferson AVTS	Jefferson College
Air Conditioning/Refrigeration	Air Conditioning/Refrigeration
Architectural Drafting	Architectural Drafting
Automotive Technology	Automotive Technology
Business Management	Business Management
Electronics	Electronics
Hotel-Motel-Restaurant	Hotel-Motel-Restaurant
Machine Shop	Machine Tool Technology
Welding	Welding

**Metropolitan Community Colleges—Platte City Area Vocational Technical School
Excelsior Springs Area Vocational Technical School, Fort Osage Area Vocational
Technical School, (Independence), Joe Herndon Area Vocational Technical School,
(Raytown), Kansas City Area Vocational Technical School**

Platte City AVTS	Metropolitan Community College
Electronics	Electronics--Maple Woods*

*Will accept 30 hours if student can pass college test.

Excelsior Springs AVTS	Metropolitan Community College
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No comparable programs reported.

Fort Osage AVTS

Metropolitan Community College

Maple Woods awards 10 hours credit for two first semester courses upon successful completion of challenge exam.

Joe Herndon AVTS

Metropolitan Community College

Longview accepts up to 9 hours credit in data processing, but will transcript only after student successfully completes 15 hours at the college.

Maple Woods awards 10 hours credit for two first semester courses upon successful completion of challenge exam.

Kansas City AVTS

Metropolitan Community College

No comparable programs reported.

Mineral Area College—Lead Belt Area Vocational Technical School (Bonne Terre), Arcadia Valley (Ironton)

Lead Belt AVTS

Mineral Area College

Data Processing
Electronics
Health Services Aide
Secretarial

Mid-Management (1 course)
Electronics
Nurse Aide (5 hours)
Secretarial*

*Students can test out of some courses.

Arcadia Valley AVTS

Mineral Area College

Health Services Aide
Secretarial

Nurse Aide (5 hours)
Secretarial*

*Students can test out of some courses.

Moberly Area Junior College—Moberly Area Vocational Technical School, Macon Area Vocational Technical School

The programs listed below are not comparable in their entirety, but some overlap exists at basic levels.

Moberly AVTS

Moberly Area Junior College

Automotive Mechanics
Clerical
Electronics
Metal Trades
Secretarial
Welding

Automotive Technology
Secretarial Science
Electronics Technology
Machine Shop
Secretarial Science
Welding

Macon AVTS

Automotive Mechanics
Clerical
Electrical Trades/Electricity
Secretarial
Welding

Moberly Area Junior College

Automotive Technology
Secretarial Science
Electronics Technology
Secretarial Science
Welding

St. Louis Community College—Lewis & Clark Area Vocational Technical School (St. Charles), O'Fallon Technical School (St. Louis City), St. Louis County Special School District

There may be comparability between the AVTS and community college programs listed below, but this cannot be determined without an evaluation of each program.

Lewis & Clark AVTS

Automotive Mechanics
Building Trades
Data Processing
Drafting
Electronics
Health Services Aide

St. Louis Community College

Automotive Technology
Construction Technology
Data Processing
Engineering Drafting
Electronic Engr. Tech.
7 Health Programs

O'Fallon Technical School

Accounting
Architectural Drafting
Automotive Mechanics
Building Trades
Child Care
Clerical
Commercial Art
Data Processing
Drafting

Electrical Trades/Electricity
Electronics
Nursing (Practical)
Plumbing
Secretarial

St. Louis Community College

Accounting
Architectural Technology
Automotive Technology
Construction Technology
Child Care Assistant
Clerk Typist, Secretary
Adv. Design & Commercial Art
Data Processing
Engr. Drafting, CADD, Arch.
Technology
Electrical Engr. Tech.
Electronics Engr. Tech.
Nursing
Plumbing Design Engr.
Secretarial

St. Louis County Special School District

Automotive Mechanics
Building Trades
Business & Office Education

Child Care
Commercial Art
Data Processing
Diesel Mechanic
Drafting

St. Louis Community College

Automotive Technology
Construction Technology
Secretarial, Clerk Typist Word
Processing
Child Care Assistant
Adv. Design & Commercial Art
Data Processing
Automotive Technology
Engr. Drafting, CADD, Arch. Tech.

Electrical Trades/Electricity
Electronics
Health Services Aide
Horticulture
Plumbing

Electrical Engr. Tech.
Electronic Engr. Tech.
7 Health Programs
Horticulture
Plumbing Design Engr.

State Fair Community College—Warrensburg Area Vocational Technical School, State Fair Area Vocational Technical School

Warrensburg AVTS

Agriculture
Automotive Mechanics
Building Trades
Business & Office Education
Data Processing
Marketing & Distributive Education
Nursing (Practical)
Secretarial
Welding

State Fair AVTS

Agriculture
Building Trades
Clerical
Electronics
Health Occupations
Machine Trades
Mechanical Technology
Secretarial
Welding

State Fair Community College

Agriculture
Automotive Technology
Building Materials Merchandise
Secretarial Science
Computer Information Systems
Mid-Management
LPN
Secretarial Science
Welding

State Fair Community College

Agriculture
Building Materials Merchandise
Clerical
Electronics Technology
LPN or Respiratory Therapy
Machine Technology
Auto Technology
Secretarial Science
Welding

Three Rivers Community College—Poplar Bluff Area Vocational Technical School, Current River Area Vocational Technical School (Doniphan)

Poplar Bluff AVTS

Marketing & Distributive Education

Current River AVTS

Agriculture
Clerical
Data Processing
Secretarial

Three Rivers Community College

Marketing Management

Three Rivers Community College

Agriculture
Secretarial Science
Data Processing
Secretarial Science

Trenton Junior College— Chillicothe Area Vocational Technical School

Trenton Junior conducts cooperative programs with Chillicothe Area Vocational Technical School in the following areas:

- Auto Body Repair
- Automotive Mechanics
- Building Trades
- Drafting
- Electronics
- Farm Equipment Repair
- Welding

VOCATIONAL EDUCATION PROGRAMS AT FOUR-YEAR COLLEGES AND UNIVERSITIES AND AREA VOCATIONAL TECHNICAL SCHOOLS

Central Missouri State University—Clinton Area Vocational Technical School, State Fair (AVTS), Warrensburg Area Vocational Technical School

Clinton AVTS

No comparable program reported

State Fair AVTS

Electronics

Warrensburg AVTS

No comparable programs reported.

Central Missouri State University

Central Missouri State University

Electronics option in Electricity & Electronics Technology

Central Missouri State University

Lincoln University—Columbia Area Vocational Technical School, Eldon, Jefferson City, Linn Area Vocational Technical School

The Lincoln programs identified below include courses similar to those offered at area vocational schools.

Columbia AVTS

Building Trades
Data Processing
Electronics
Health Services Aide
Nursing (Practical)

Tri-County Technical School (Eldon)

Civil Engineering Tech.
Electronics
Graphic Arts

Nichols Career Center (Jefferson City)

Building Trades
Data Processing
Electronics
Nursing (Practical)

Linn AVTS

Electronics
Machine Trades

Lincoln University

Building Construction
Computer Science
Electronics Technology
Nursing Science
Assoc. Applied Science Degree

Lincoln University

Pre-Engineering
Electronics Technology
Printing Technology

Lincoln University

Building Construction
Computer Science
Electronics Technology
Assoc. Applied Science Degree

Lincoln University

Electronic Technology
Mechanical Technology

Missouri Southern State College—Carthage Area Vocational Technical School, Crowder Area Vocational Technical School, Franklin Technical School (Joplin)

Carthage AVTS

Missouri Southern State College

No comparable programs reported.

Crowder AVTS

Missouri Southern State College

No comparable programs reported.

Franklin Technical School

Missouri Southern State College

No comparable program reported.

Missouri Western State College—Platte City Area Vocational Technical School, N.S. Hillyard Area Vocational School (St. Joseph)

The programs at Missouri Western noted below contain courses similar to those offered at area vocational technical schools. Students have the option to test out of courses for college credit.

Platte City AVTS

Missouri Western State College

Business and Office Education
Specialties
Data Processing
Electronics
Word Processing

Secretarial Science

Data Processing
Electronic Technology
Secretarial Science

N.S. Hillyard AVS

Missouri Western State College

Auto Body Repair
Automotive Mechanics
Automotive Services
Business & Office Education
Specialties
Electronics
Graphic Arts
Heavy Equipment Repair

Machine Shop
Nursing (Practical)

Automotive Technology
Automotive Technology
Automotive Technology
Secretarial Science

Electronics Technology
Construction Engr. Tech.
Constr. Engr. Tech., Automotive Tech.,
Agriculture Tech.
Construction Engr. Tech.
Associate Degree Nursing

Northeast Missouri State University—Kirkville Area Vocational Technical School

Kirkville AVTS

Northeast Missouri State University

No comparable program reported.

**Northwest Missouri State University—Northwest Missouri Area Vocational School
(Maryville)**

Northwest Missouri AVS

Building Trades
Welding

Northwest Missouri State University

Building Construction (Related)
Part of Metals Technology

Southeast Missouri State University—Cape Girardeau Area Vocational Technical School

Cape Girardeau AVTS

No comparable programs reported.

Southeast Missouri State University

Southwest Missouri State University—W.J. Graff Area Vocational School (Springfield)

W.J. Graff AVS

No comparable programs reported.

Southwest Missouri State University

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